The Financial Stability Risk Data Framework: Data challenges for entity and instrument identification, classification and relationships

Linda Powell

Chief, Economic Data Management and Analysis Macroprudential Toolkit Conference - December 2011

The analysis and conclusions set forth are those of the authors and do not indicate concurrence by other members of the research staff or the Board of Governors.

The Identification Problem

City National Bank in California

- ID_RSSD = 63069
- FDIC Certificate id = 17281
- SEC CIK = 275216
- SWIFT id = CINAUS6L
- Vendor ids = Proprietary
- 14 banks named City National Bank
- 147 banks with a variant of the name City
 National Bank
- To combine data from different sources you need a mapping of possible identifiers

Why is an LEI necessary

- A Legal Entity Identifier would be a code that uniquely and accurately identifies an entity.
- Analyze risk of regulated entities including entity parents and affiliates
- Identify Counterparties
 - Determine responsibility
 - Identify exposure
- Settle transactions and payments

Instrument Identification Problem

Financial Instruments can look similar

Name	Maturity	CPN	CPN Type	Callable
Amer Intl Grp 8.175%	5/15/2058	8.175	FRN	
Amer Intl Grp	5/15/2068	8.175	FRN	Yes
Amer Intl Grp 8.25%	8/15/2018	8.25	Fixed	Yes
Amer Intl Grp 6.25%	5/1/2036	6.25	Fixed	Yes
Amer Intl Grp 6.25%	5/1/2036	6.25	Fixed	
Amer Intl Grp 4.25%	5/15/2013	4.25	Fixed	

Quickly & easily uniquely identifying an instrument helps:

- Settle transactions
- Value assets
- Aggregate exposure

Unique Instrument Identification

Many but not all asset classes have universally accepted unique identifiers

Areas for research:

- Identify the gaps which asset classes need identifiers
- Prioritize the gaps
- Consider alternative ways to identify asset classes
 - Could an algorithm be used to create a unique identifier dynamically. The Inchi project did this for the chemical compound industry.
 - New asset classes are created
 - Derivatives are based on multiple factors